R.J. Grondin & Sons, Inc.
Cumberland County
Scarborough, Maine
A-492-71-H-A

Departmental
Findings of Fact and Order
Air Emission License

After review of the air emission license application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

R.J. Grondin & Sons, Inc. (Grondin), located in Scarborough, Maine has applied to renew their Air Emission License, permitting the operation of their crushed stone and gravel facility.

Grondin has requested to amend their air emission license to replace rock crusher #2 and Generator #1.

B. New Emission Equipment

Rock Crushers:

Designation	Powered	Process Rate (tons/hour)	Control Device	Date of Manufacture
Crusher #2	electrical	200	Spray Nozzles	2002

Diesel Units:

Source ID	Max. Capacity (MMBtu/hr)	kW	Fuel Type, % sulfur
Generator #1	5.12	600	diesel fuel, 0.05%

C. Application Classification

The modification of a minor source is considered a major modification based on whether or not expected emission increases exceed the "Significant Emission Levels" as defined in the Department's regulations. This modification is determined to be a minor modification and has been processed as such.

II. BEST PRACTICAL TREATMENT

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Department regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Department's regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Crusher #2

Crusher #2 is a portable unit with a rated capacity 200 ton/hr. This crusher is therefore subject to EPA New Source Performance Standards (NSPS) Subpart OOO for Nonmetallic Mineral Processing Plants manufactured after August 31, 1983, with capacities greater than 150 tons/hr for portable plants and greater than 25 tons/hr for non-portable plants.

The regulated pollutant from the Crusher #2 is particulate emissions. To meet the requirements of Best Practical Treatment (BACT) for control of particulate matter (PM) emissions from the Crusher #2, Grondin shall maintain water sprays on the rock crusher and operate as needed to control visible emissions. Visible emissions from the Crusher #2 shall be limited to no greater than 10% opacity on a six (6) minute block average basis.

C. Generator #1

Generator #1 is used primarily to provide electrical power to the rock crushers.

A summary of the BACT analysis for Generator #1 is the following:

1. The total fuel use for the generators shall not exceed 70,000 gal/year of diesel fuel, based on a 12 month rolling total, with a maximum sulfur content not to exceed 0.05% by weight.
2. Chapter 106 regulates fuel sulfur content, however in this case a BPT analysis for SO_2 determined a more stringent limit of 0.05% was appropriate and shall be used.
3. The PM limit is derived from Chapter 103.
4. NO_x, CO, and VOC emission limits are based upon AP-42 data dated 10/96.
5. Visible emissions from the generator #1 shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

D. Facility Emissions

Grondin shall be restricted to the following annual emissions, based on a 12 month rolling total:

Total Licensed Annual Emissions for the Facility
(used to calculate the annual license fee)

	PM	**PM_{10}**	**SO_2**	**NO_x**	**CO**	**VOC**
Generator #1	0.41	0.41	0.18	10.98	2.92	0.31
Generator #2	0.16	0.16	0.07	6.05	1.30	0.48
Total TPY	**0.57**	**0.57**	**0.25**	**17.03**	**4.22**	**0.79**

Note: emissions are based on firing 50,000 gal/yr in generator #1 and 20,000 gal/yr in generator #2. However, these figures are estimates and not licensed limits.

III. AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a renewal source shall be determined on a case-by-case basis. Modeling and monitoring are not required of a renewal if the total emissions of any pollutant released do not exceed the following:

Pollutant	TPY
PM	25
PM_{10}	25
SO_2	50
NO_x	100
CO	250

Based on the above total facility emissions, Grondin is below the emissions level required for modeling and monitoring.

ORDER

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-492-71-H-A, subject to the conditions set forth in License A-492-71-G-R, and the following conditions:

Specific Conditions

The following shall replace the language referencing Crusher #2 in Specific Condition (16) of License A-492-71-G-R:

(16) **Crusher #2**

A. Grondin shall maintain spray nozzles for particulate control on Crusher #2 and operate them as necessary to limit visible emissions to no greater than 10% opacity on a six (6) minute block average basis. [MEDEP Chapters 115, Chapter 101, BACT]

B. Grondin shall maintain a log detailing the maintenance on the water spray nozzles. The maintenance log shall be kept on-site at the rock crushing location. [MEDEP Chapter 115, BACT]

C. Grondin shall maintain a log detailing and quantifying the hours of operation on a daily basis for Crusher #2. The operation log shall be kept on-site at the rock crushing location. [MEDEP Chapter 115, BACT]

The following shall replace Specific Condition 17 in License A-492-71-G-R.

(17) **Generators**

A. Total fuel use for Generators #1 and #2 shall not exceed 70,000 gal/yr of diesel fuel with a maximum sulfur content not to exceed 0.05% by weight. Compliance shall be based on fuel records from the supplier showing the quantity of fuel delivered and the percent sulfur of the fuel. Records of annual fuel use shall be kept on a 12-month rolling total basis. [MEDEP Chapter 115, BACT, BPT]

B. Emissions shall not exceed the following [MEDEP Chapter 115, Chapter 103, BACT, BPT]:

Emission Unit		**PM**	**PM_{10}**	**SO_2**	**NO_x**	**CO**	**VOC**
Generator #1	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.61	0.61	0.26	16.38	4.35	0.46
Generator #2	lb/hr	0.11	0.11	0.05	3.97	0.86	0.32

C. Visible emissions from Generators #1 and #2 shall each not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [MEDEP Chapter 101]

The following are new Conditions:

(1) **New Source Performance Standards for rock crushers** [40 CFR Part 60 Subparts A and OOO]

A. Crusher #2 is subject to 40 CFR Part 60 Subparts A and OOO and Grondin shall comply with the notification and record keeping requirements of 40 CFR Part 60.676 and Part 60.7, except for Section (a)(2) of 60.7 per Subpart OOO, §60.676(h).

B. Grondin shall have an initial performance test performed on the rock crushing operation per the applicable sections of 40 CFR Part 60, Subpart OOO, §60.675. This consists of a certified Method 9 observation. The performance test shall be completed within 60 days after achieving the maximum

production rate at which the unit will be operated, but no later than 180 days after initial startup of the unit. Grondin shall submit a test notice to the regional inspector at least 30 days prior to the performance test. Any rescheduled test requires a 7 day notice to the regional inspector.

(2) Grondin shall keep a copy of this Order on site, and have the operator(s) be familiar with the terms of this Order. [MEDEP Chapter 115]

(3) This order shall expire concurrently with Air Emission License A-492-71-G-R. [MEDEP Chapter 115]

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2004.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:_____
DAWN R. GALLAGHER, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 8/11/2004
Date of application acceptance: 8/16/2004

Date filed with the Board of Environmental Protection: _____

This Order prepared by Jonathan Voisine, Bureau of Air Quality.